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ABSTRACT

This document is an issue of a journal "Linkages," that in general serves as a forum for exchanging information and ideas on issues relevant to three City University of New York (CUNY) programs. The programs are Search for Education, Elevation, and Knowledge (SEEK), College Discovery (CD), and College Discovery and Development Program (CDDP). This theme issue highlights the SEEK program and contains three articles describing creative experiments to enhance the academic integration of students in this program into the colleges they attend. The goal is to increase the chances that they will remain in college and graduate. The articles included in this volume are the following: (1) "The Take Advantage Now/Parent Education Project" (David Walters); (2) "The Effect of Coordinated Programming on the Academic Performance and Persistence of Underprepared College Students: A Longitudinal Study" (Frances Geteles); and (3) "Effectiveness of Peer Tutor/ Mentors for Disadvantaged Students at Brooklyn College: Preliminary Analyses" (Mary Oestereicher). The issue concludes with a description of some activities and publications of the Office of Special Programs. Biographical information on the contributors is presented. (VM)

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PERSPECTIVES FROM SPECIAL PROGRAMS

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Exploring and Testing Experimental Programs

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LINKAGES: PERSPECTIVES FROM SPECIAL PROGRAMS

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Linkages is the Journal of the Office of Special Programs of The City University of New York (CUNY). The Office of Special Programs (OSP) is responsible for the administrative oversight, coordination, long-range planning, and enhancement of the University's opportunity programs: Search for Education, Elevation, and Knowledge (SEEK) in the senior colleges; College Discovery (CD) in the community colleges; and the College Discovery and Development Program (CDDP) in the five high school centers of the consortium with the New York City Board of Education. The primary purpose of Linkages is to serve as a forum for exchanging information and ideas on issues relevant to these three programs.

Linkages sends out periodic calls for papers on specific topics. However, we welcome contributions at any time. Papers can be descriptions of programs or curricula, reports of research, philosophical/theoretical pieces, or book reviews. We give preference to papers from people who work with Special Programs students and/or papers that pertain directly to the Special Programs population. However, we welcome contributions from other people within or outside of the University and papers about other populations of students as long as they have some relevance to Special Programs.

Articles are selected for publication by a committee from the Office of Special Programs. Submissions should be sent to: Editor, Linkages; Office of Special Programs, The City University of New York, 555 West 57th Street, Suite 1512, New York, N.Y. 10019.

The editorial committee for this issue of Linkages was:
Peggy Crull, Editor
Barbara Gombach
Justina Gonzalez-Marti
John Green

INTRODUCTION

It is important that the SEEK, College Discovery, and College Discovery and Development programs maintain a spirit of experimentation. Although the University's Special Programs have made great strides toward developing models of education for "nontraditional" students in the past twenty years, the persistence of a high attrition rate in SEEK and College Discovery indicates that there is still much to be learned. In addition, since more and more students throughout the nation are arriving at the doors of the traditional academy underprepared and with limited financial resources, all colleges must search for ways to respond to a broader range of educational needs.

Because of the University's commitment to experimentation which will lead to the integration of all students into the mainstream of college life, the University's SEEK Program budget provides several kinds of funds earmarked for exploring and monitoring new methods of remediation. For example, since the early 1980's monies have been allocated for a number of experimental summer programs for both high school and college students designed either to provide extra remediation or to upgrade students' skills in math, science, and technology. Two major ongoing sources of funding for experimentation have supported the programs which are the basis for the articles in this issue of Linkages. The first is Instructional Temporary Service Funds, earmarked "to develop and implement experimental or innovative courses designed to improve the retention of SEEK students." The second is SEEK Retention Research Funds intended to generate studies "on the retention of SEEK students." In both cases campuses are encouraged to apply for these funds in order to explore new ideas about how best to serve their students. Some campuses have made use of both sources to set up a program and to test its effectiveness in subsequent semesters.

The three articles in this volume describe creative experiments to enhance the academic integration of SEEK students, and, thus, increase the chances that they will remain in school and graduate. In the first article Walters proposes that all students need encouragement from their parents to take advantage of the educational opportunities that are available to them. He suggests, however, that parents and other significant members of the families of nontraditional students may be reluctant to advise or advocate for their children because college is alien to them. To remedy this, Walters and his colleagues offer a series of workshops to acquaint parents with the various services provided by SEEK and the College. His article gives a background and description of the workshops which can serve as a guide to others who might want to set up similar programs. Geteles' article reports on a large study designed to evaluate the effectiveness of "coordinated" programming as a way of integrating students' academic experience for them. Under this system, students are grouped together during their first semester in the same basic skills classes and for counseling. One such group of students was followed by Geteles for several semesters. The present article reports the results of comparisons of those students with a group of "noncoordinated" students in terms of grades and retention rates. Oestereicher presents some preliminary results of a peer tutor/mentor program designed to provide students not only with extra assistance with their course work but also with student role models. The peer tutor/mentor program she evaluates in the present article was created out of the conviction that students need a combination of inspiration and skills development in order to survive the first year of college. Her paper presents preliminary comparisons on course grades and study habits and attitudes of the mentored versus non-mentored students.

The final section of this issue of Linkages is a summary of activities undertaken by the Office of Special Programs over the last several months. This will become a regular feature of Linkages.

The Linkages Editorial Committee is grateful to the authors for undertaking these explorations and sharing them with our readers. Others participating in the preparation of this volume were Word Processing which typed the entire volume, Graphics which designed the cover, and Reprographics which did the printing. Our thanks go out to them as well. Finally, the editorial committee appreciates the contributions of a number of staff from the Office of Special Programs to the production of the journal including Laraine Bengis, Lou Hofmann, Frank Kehl, Lourdes Mangual, Albertine Power, Kim St. Denny, Angela Sales, Herman Wright, Dean Joseph Harris, and University Dean Eleanor Pontes.

PEGGY CRULL, EDITOR

THE TAKE ADVANTAGE NOW/ PARENT EDUCATION PROJECT

DAVID WALTERS[1]

INTRODUCTION

Children are society's most important asset and parents are their first teachers and counselors. Even though college students are no longer "children", their parents' support is still necessary for their success. It was with this feeling that the Take Advantage Now/Parent Education Project (TAN/PEP) was conceived.

Developed under the auspices of the Department of Education Services/ SEEK at Brooklyn College, the TAN/PEP Project offers education, support and counseling for parents and guardians of entering freshmen in the SEEK program in the various aspects of college life to which their sons and daughters are exposed. The TAN/PEP Project took place for the first time in the Fall Semester of 1985-86 and was repeated during the Fall Semester of 1986-87. It was funded through the SEEK Program Budget appropriation for Instructional Temporary Service Funds.

This paper is an overview and summary of the Project as it was carried out in 1986-87. It discusses the research and experience which was the impetus for the Project, outlines the purpose and topics of the workshops, and summarizes the responses of the participants. It is offered as a model for other programs interested in exploring ways to provide additional supports for their non traditional students.

ATTRITION AND ITS UNDERLYING CAUSES

The SEEK Program is the higher educational opportunity program at Brooklyn College, as it is in each of the senior colleges of the City University of New York (CUNY). SEEK includes the processes of recruitment, selection, admission, orientation, remediation, guidance, counseling, financial aid, developmental and compensatory instruction throughout the students' college experience. Despite the special components provided by the program, a relatively high portion of SEEK students drop out before graduation and, indeed, do not utilize many of the program resources that are designed to help them complete their college education.

Student retention is a major concern not just in SEEK, but throughout American higher education (Smith, 1982). In colleges in general and at CUNY in particular, researchers have found academic underpreparedness to be a key contributor to attrition (Lavin, Murtha, and Kaufman, 1984; and Perry, 1981). In fact, the Carnegie Council of Policy Studies in Higher Education concluded in 1972 that "because of deficits in our public school system, about one-third of our youth are ill-educated,

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[1]The author wishes to thank John Staton who assisted in conducting the workshops and Louise Dennis who assisted with evaluating the project.

ill-employed, and ill-equipped to make their way in American society" (p. ix). Even though enhancing high school curricula and providing remedial work in college is clearly a primary way to prevent dropping out in college and the resulting problem of unemployment and underemployment, educators are suggesting that we must recognize the complexity of the problem of attrition and develop other strategies for solving it, strategies which address it on many levels (Dollar, 1983, p.410). According to Lavin, Murtha, and Kaufman (1984) the complexity of the problem is increased in an urban institution such as CUNY:

> The urban college student of today enjoys greater opportunities for employment and faces greater family responsibilities than his or her national counterpart. As a large commuter institution located in New York City's diverse service economy, the City University clearly reflects the character of its urban clientele in its long-term attendance and graduation patterns. We believe that as our society becomes more urbanized and careers become more intertwined with higher education, the patterns now evident at City University will predominate. (Lavin, Murtha, and Kaufman, 1984, pp. 17-18)

Respecting the complexity of the problem of attrition, researchers have looked to factors other than academic preparedness to explain why students leave school. They have identified emotional and social preparedness as factors which will help students to maneuver successfully through the rigors of college. One longitudinal study of 9,778 high school seniors revealed that persistence in college is a function of three factors:

1. the importance that the undergraduates themselves assign to a degree;

2. their having decided by the second year of high school or earlier that they would go on to college; and

3. the fact that their parents had definitely wanted them to attend. (Trent and Medsker, 1968, p. 97)

However, for many young people in the lower socio-economic classes, a college education does not have a high level of importance and, indeed, seems to be beyond their grasp both academically and financially. Cope and Hannah (1975) report that many students do not even expect to graduate when they enroll in college. Indeed, 25% of the students who withdraw from college consider doing so before they enroll (Cope and Hannah, 1975, p. 20). Apparently, a self-fulfilling prophecy of failure is an important factor in college dropout rates. Without support of significant adults in their lives to encourage and guide them, students who start out with low expectations are even more likely to leave college.

PARENTS' CONTRIBUTION TO RETENTION

It is the belief of the staff of the TAN/PEP Project that parents are a key factor in helping students become emotionally and socially prepared for college. Whitlock (1983) reminds us that parents remain concerned about the quality of schooling their children receive even when they are in college.

> Many conscientious parents are concerned and trying to do something about the situation in their own families. And for those who are successful, the years of greatest

> pleasure in some ways are those of late adolescence, as communication between child and parent becomes genuinely adult (p. 37).

A 1981 study by Nichols shows that parents not only care about what happens to their college-aged children but have a significant influence on whether or not they succeed. Inspiration, aspiration and expectation flowing from the family had a positive influence on the behavior of the black students at Jackson State surveyed by Nichols. A wide variety of students' aspirations were due to parental status and societal status quo. Approximately forty percent of the students in the study reported that their college enrollment was inspired by familial influence. However, only a small number of students in this study had determined what their plans were ten years hence.

The Jackson State students in Nichols' study were like Brooklyn College SEEK students in several respects. Most of the students surveyed were the first in their family to attend college. Many were from large families with neutral or negative sibling influences. Parents of students such as this often are at a disadvantage in attempting to prepare their children for college or help them through the experience. They may rely upon their children to contribute to the family income or, at least, to become financially independent at an early age, and, therefore, do not encourage them to aspire to go to college. Furthermore, those parents of lower socio-economic students who do wish their children to attend college are often unable to provide the information, advice or encouragement needed for college success because they have not attended college and therefore do not have any experience from which to draw. This is in direct contrast to most middle- and upper-class children who are in academic programs designed to lead them into institutions of higher education and whose parents have college educations and expect them to attend college as a regular part of their education. Therefore, Daher and Weisinger's contention that "transition into college involves a range of issues for parents as well as students," takes on a special meaning in this instance (Daher and Weisinger, 1979, p. 379).

THE TAN/PEP PROJECT

Whitlock has suggested that in situations with special populations such as the SEEK population, greater care must be taken to provide for their needs in college. (Whitlock, 1983). The TAN/PEP Project is one way to meet those special needs. Its purpose is to teach parents and guardians of nontraditional students that there are resources available which, if utilized to the fullest extent, can increase the likelihood of success of their college student.

Parents/guardians who have felt powerless to help their children due to their own lack of educational background, college experiences and/or financial resources may realize that they can make a contribution by demonstrating interest in their sons' and daughters' college endeavors, by sharing information they have learned about resources available through SEEK, and by encouraging their sons and daughters to utilize those resources. Through offering information concerning the available college support services to parents and guardians and reinforcing the importance of their encouragement as role models, the Project Director hoped the parents and guardians would pay more attention in their homes to the practices and procedures required of their children for college retention.

During the first week of the Fall semester 1986, an announcement was made to all entering freshman in the SEEK Program[2] that letters would be sent to their parents asking them to participate in the TAN/PEP Project and a brief description of the project's goals was given. Letters of invitation were prepared and mailed. Nineteen parents and guardians were recruited for the 1986 project.

A series of workshops, which utilized a variety of teaching methods (e.g., lectures, discussion, role-playing), were designed to provide basic information for the parents and guardians on such topics as the structure of the College, how things work and to whom to go for assistance in problem-solving. Specific objectives of the workshops/seminars were:

1. to introduce and define the concept of parent/guardian education;

2. to stress the importance of parent/guardian involvement in the education of children;

3. to inform them of the basic financial aid forms and processes so they might encourage their children to maximize their receipt of subsidy money;

4. to define retention and its impact on the university's services;

5. to make the parents and guardians aware of the role of the SEEK Guidance Counselor, academic advisor and other student service personnel at Brooklyn College;

6. to define counseling and advisement and their role in helping students persist in their educational endeavors; and

7. to explain the leadership role of the University in the retention of students.

The workshops were conducted by the TAN/PEP Project Staff, who are experienced in working with college students and with parent groups. Each workshop covered a specific content. Session one was an orientation. In session two parents were given information that could be used to help improve their child's study habits. The importance of using time management techniques to enhance planning skills that can reduce anxiety was emphasized. The third dealt with the Financial Aid process at Brooklyn College. The fourth, which highlighted the importance of the family in the educational process, included a values clarification exercise for the participants as well as discussion of the Core Curriculum at Brooklyn College. In the fifth session counseling and advisement were defined and information given on the responsibilities of the SEEK Guidance Counselor and other counseling services and activities offered at Brooklyn College. The entire process was reviewed in session six.

To facilitate the process, each participant was given the Brooklyn College Bulletin. This was done to familiarize parents with the rules, regulations and general information needed by all students to succeed and graduate from Brooklyn College. In addition, elements of the "Theme-Centered Interactional Method (TCI)" for leading groups were used to create an environment that was conducive to developing openness and friendliness among the participants and would result in the sharing of pertinent information.

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[2]All SEEK freshmen are enrolled in a DES 0.3, Counseling Workshop, a course which meets two hours per week and provides students with an orientation to Brooklyn College.

ASSESSING THE EFFECTIVENESS OF TAN/PEP

The question of whether these workshops helped parents to involve themselves in and affect their children's education is an important one. It is clear from the responses that parents who attended felt that their being interested in coming to the sessions would produce a positive effect on their children's feelings toward going to college. A sense of support and assurance was obtained because parents felt that if a problem arose there was now a way to deal with it.

For some of the parents, these sessions were their first opportunity to visit a campus and several commented favorably on the Brooklyn facilities. A few resented the fact that they had not been invited to the College's Freshman Orientation. Because of the parents previous lack of information, the Project proved to be a major source of information for first-time college students and parents. The sense of the researchers was that the parents' participation in the sessions and the knowledge they gained would bring positive results. This sense is reflected in the following comments taken from the evaluation forms.

> "I will encourage my son to use the services of the SEEK Program. I know that he needs financial aid, counseling and, possibly, tutorial services."
>
> "I'm going home and sit down and discuss his day; write it out; try to find more time for study and discuss the syllabus of each class."
>
> "I have already applied things we have discussed and have been successful with my son. Just talking, I have picked up ideas and will continue to use other people's ideas."
>
> "I will meet with my child and discuss a problem that she may have."

It is important to note that the parents felt that they had gained enough information to act as resource people not only for their children but also for other family members and friends in their communities. There was a strong feeling among many that belonging to the college community was now an important goal.

The TAN/PEP project aimed to give the parent/guardian participants a better understanding of Brooklyn College and its resources. The Project Staff hopes that workshop participants (particularly those parents and guardians who want to help but do not know how) will now be more able to intervene positively in the educational process of their children. However, the Project Staff realize that measuring the effectiveness of this project in terms of the impact that it may have upon the behavior of the students themselves is an extremely difficult task. Now that there have been two groups of parents and guardians who have taken part in this program, it would be appropriate to look at student success at the end of one year and two years at Brooklyn College.

The Project Staff is in the process of developing a proposal for a future TAN/PEP Project that includes a research component aimed at measuring the effects of the project upon the attitudes of the participating parents and guardians and upon the college students' persistence and use of resources. It is the staff's belief that the positive attitudes of the participants toward the program, as evidenced by their responses to the questionnaires, will have a positive effect on student retention.

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THE EFFECT OF COORDINATED PROGRAMMING ON THE ACADEMIC PERFORMANCE AND PERSISTENCE OF UNDERPREPARED COLLEGE STUDENTS: A LONGITUDINAL STUDY

FRANCES GETELES[1]

INTRODUCTION

For several years prior to September 1980, The City College of CUNY SEEK Program had been using a system of coordinated programming for certain of its entering freshmen, in particular those who had the weakest academic skills and needed the most basic remediation. A group of 15 to 20 such students would be programmed together for the same English 1, College Skills 1.8 and Social Science 1.8 classes, and would be assigned to the same counselor. It was assumed that this mode of programming was useful because it: (1) would enable the instructors and the counselor to work together as a team, planning interrelated curricula and coordinated teaching strategies designed to meet the needs of the students; and (2) would provide a social environment for the students, undercutting the initial isolation which is often experienced by students entering the new and strange environment of the college. The premise of the programming was that these factors would work together to provide the best chance for the students to overcome their difficulties and be successful in college.

In addition to this Coordinated - Level 1 program, coordinated programs were run for students at a somewhat more advanced level who placed in English 2, College Skills 2 and Social Science 2.8 and who were interested in majoring in nursing (SNAP) or science and engineering (MAPES). In SNAP, in addition to the remedial courses noted above, students would take Speech and an Introduction to Nursing course. The content in their courses dealt largely with nursing-related problems and issues so that skills were taught with this content as the basis of learning. Similarly, in MAPES, the students took College Skills and English, Math, and an Introduction to the Sciences.

Some early research on the effectiveness of these coordinated programs showed that: (1) Coordinated I students did not differ in their drop-out rate at the end of one year from students starting at the same level in regular, non coordinated classes. However, more of the Coordinated students who dropped out did so in good academic standing - i.e. with Grade Point Averages (GPA's) of 2.00 or better - than did the non coordinated students (Brown, 1981), and (2) MAPES students were found to have an improved chance of successful graduation, even though many of them ultimately had majors in fields other than technology or the sciences (Kopperman and Roth, 1981).

In 1980 a decision was made to extend coordinated programming, adding coordinated programs for students with mixed placements - i.e. English 1 and College Skills 2, or English 2 and

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[1]Funding for this research was made possible by a grant from the CUNY Office of Special Programs SEEK-Funded Retention Research Program. Statistical analysis was completed with the assistance of The Testing Office at The City College (formerly The Office of Institutional Research).

College Skills 1 - and for more advanced (Level II) students not necessarily majoring in nursing, technology or the sciences. This decision was based on the assumption of some members of our faculty that academic success could thereby be improved. While extending the program, however, it was also agreed that long-term research would be conducted to see whether, in fact, the academic outcome was better for the Coordinated than for the Non-coordinated students. The idea was to go beyond the one-year studies of the past and follow the students for several years. In addition the study was planned so that we could examine certain other factors which were thought to influence outcome to test the extent of their influence.

METHOD

The subjects of this study and the data collected are described below:

Subjects. The subjects of this study were students who entered City College in September 1980 and who were required to take remedial English (1 or 2) and College Skills (1 or 2). Several groups of students were included:

A. SEEK students in the following coordinated programs:

Level I: Eighty-five (85) students with the weakest academic skills, placed in English 1, College Skills 1.8, and Social Science 1.8 classes.

Mixed Level: Twenty (20) students with mixed academic skills, placed in English 1 and College Skills 2 or English 2 and College Skills 1.

Level II Regular: Twenty-one (21) students at a more advanced level of academic skills, placed in English 2, College Skills 2, and Social Science 2.8.

Level II SNAP: Thirty-nine (39) Students at a more advanced level of academic skills, placed in English 2, College Skills 2, and Social Science 2.8, and interested in majoring in nursing.

Level II MAPES: Twenty-seven (27) students at a more advanced level of academic skills, placed in English 2, College Skills 2, and Social Science 2.8, and interested in majoring in Science and Engineering.

B. Sixty-eight (68) SEEK students who were not in coordinated programs.

C. Fifty (50) non-SEEK students, randomly selected, who were registered in remedial courses in both English and College Skills during the Fall 1980 semester.

Data Collected. Data on these students were obtained from three sources: transcripts, college computer records and student financial aid records. This last source of information, however, was available for SEEK students only.

From these sources a great deal of information was available on each student, including personal, social and economic characteristics, academic characteristics upon entry to the college, and academic performance and persistence at the college.

At the heart of the present study are the academic variables, as described below:

A. Students' academic profiles at the time of college entry included their high school averages and their performances on the college's placement tests in reading, writing and mathematics. These latter tests are indices of a student's basic skills prior to his beginning coursework at the college. Although all the students included in this study showed weaknesses in reading and writing and were required to take remedial courses, there were nonetheless wide variations in their initial skills levels. This was particularly true in reading where the range of scores obtained was 5-40. By contrast, the writing test scores cover a narrower range of 2-8, although these numbers may represent great differences in skill.

   The mathematics scores differ from the other two in that not all the students required remediation. The range of scores was 5-61, which represents, on the one end, the student who needs to learn basic elementary arithmetic and, at the other extreme, the student who is ready to begin calculus.

B. Students' academic performances at the college were measured in a variety of ways. As a definition of success within the context of this study, the most commonly used measure of academic standing, the grade point average (GPA), seemed inadequate. Many of the subjects of the study took remedial courses for part or all of their first year at the college; some took them for even longer. Frequently the grades for these courses are Passed (P) or Repeat (R), grades which are not included in the GPA. Therefore a student's GPA, especially at the end of the first year, may be a very inaccurate reflection of his/her academic functioning. As an extreme example, one student may have passed all remedial courses with P grades but failed Physical Education and will have been given R grades in all his remedial courses, but earned an A in Physical Education, resulting in an A average. It was therefore necessary to use alternative measures of success based on the percentage of courses passed and the number of credits earned towards a college degree. Furthermore, the movement from remedial and developmental courses into standard college level courses was also given special attention as an index of progress.

These considerations resulted in the use of the following measures of academic functioning:

A. After one year (at the end of 6/81)

   1) Percentage of credit hours passed, defined as credit hours passed divided by credit hours attempted. (It should be pointed out that since remedial and developmental courses carry only partial credit, "credit hours" may not be the same as the credit value of courses. The "credit hours" measure, therefore, combines the weekly classroom hours of remedial and developmental courses with the credits for regular college courses.)

   2) College credits earned from all courses, remedial and non-remedial.

   3) GPA.

These first year data are presented for all students who started in the study.

B. After two years (at the end of 6/82)

1) Percentage of credit hours passed, defined as above, but covering the entire two year period.

2) Total college credits earned, to date, for all courses.

3) Credits earned for college level courses only, with remedial and developmental courses excluded.

4) Overall GPA.

5) GPA in college level courses only, excluding remedial and developmental courses.

These data are based on student accomplishments for the combined two-year period, and are presented only for those students who attended school for part or all of the second year, i.e. 9/81 - 6/82.

C. After 3 1/2 years (as of the data collection date in Spring 1984. Figures represent total accomplishments as of the end of the Fall 1983 semester.)

1) Total college credits earned.

2) GPA.

D. Students' persistence or retention in school was also noted in the following ways:

1) Whether the student completed the first year or not.

2) Whether or not the student completed the Spring 1982 semester. (This particular measure did not necessarily mean the student had completed four semesters since he/she may have taken a leave of absence and returned. It does, however, indicate whether or not the student was still actively pursuing a degree at the college. Only students present some time during the second year are included.)

3) Total number of semesters completed. (All students are included.)

4) A combined measure of retention and academic performance, defined as follows: in school Spring 1984 and GPA (a) above 2.00, (b) between 1.90 - 2.00, (c) below 1.90; or not in school Spring 1984 and GPA (d) above 2.00, (e) between 1.90 - 2.00, or (f) below 1.90.

Statistical Analyses

The effectiveness of coordinated programming is examined to determine the extent to which it helps to improve the academic performance of students. This is done by presenting the differences in academic performance between the Coordinated, Noncoordinated and Non-SEEK students, and then subjecting the differences to an analysis of covariance, in which the effects of the precollege academic characteristics of the students - high school average and reading, writing and mathematics scores - are statistically controlled, so that it is possible to determine whether there are additional differences between students which can be attributed to the educational programs in which they participated. The effect of coordinated programming on student retention is also evaluated by means of a Chi-Square (X^2).

While the crucial part of this study is the three-way comparison between Coordinated, Noncoordinated and Non-SEEK students, some data is also presented on the sub-groups within the SEEK Coordinated Skills programs.

RESULTS

Precollege Academic Characteristics

Tables I (p. 14) and II (p. 14) provide information about the academic characteristics of the students when they entered the College. Table I compares the SEEK students who participated in the Coordinated Skills program, the SEEK students who were in regular noncoordinated classes, and the control group of Non-SEEK students. There are no differences between the Coordinated and Noncoordinated SEEK students. On the other hand, the Non-SEEK students, while basically similar on the reading and writing placement test, had notably higher high school averages.

Table II provides similar information for the sub-groups of SEEK. The following points are noteworthy: (1) MAPES students have the highest high school averages among the SEEK students, falling about midway between the SEEK and Non-SEEK students; (2) Level II Coordinated students (Regular, MAPES and SNAP) have higher average reading and writing scores than the rest of the students in the study, even higher than the Non-SEEK students; (3) The Mixed Coordinated group have equally high writing scores, but very low reading scores; and (4) The MAPES students have mathematics scores as high as those of the Non-SEEK students.

College Academic Performance

Table III (p. 15) presents the means on each of the measures of academic functioning for Coordinated, Noncoordinated and Non-SEEK students. Differences between Coordinated and Noncoordinated SEEK students are very small. Coordinated students have a higher mean GPA after the first year, but the Noncoordinated students have a higher mean GPA in college level courses after the second year. Non-SEEK students appear to do better during the first two years in their rate of passing courses and of earning college credits; their grade point averages, however, are no better than those of the SEEK students. By the end of the fourth year, however, Non-SEEK students have not only earned more credits than SEEK students but have higher averages as well.

TABLE I

COMPARISON OF COORDINATED SEEK, NONCOORDINATED SEEK AND NON-SEEK STUDENTS ON ACADEMIC VARIABLES ON ADMISSION TO COLLEGE

Precollege Academic Variables	Group					
	Coordinated (N=192)		Noncoordinated (N=68)		Non-SEEK (N=50)	
	Mean	SD	Mean	SD	Mean	SD
H.S. Average	71.55	5.5	71.86	5.0	77.64	6.0
Reading Score	23.55	6.7	24.85	7.0	26.65	5.3
Writing Score	4.56	1.9	4.34	1.5	4.54	1.6
Math Score	23.89	9.3	26.87	12.2	34.00	12.9

TABLE II

COMPARISON OF SUBGROUPS WITHIN THE SEEK COORDINATED GROUP ON THE ACADEMIC VARIABLES ON ADMISSION TO COLLEGE

Precollege Academic Variables	Group									
	Level I (N=85)		Mixed (N=20)		Level II-Rg (N=21)		Level II MAPES (N=27)		Level II SNAP (N=39)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
H.S. Average	70.88	5.8	68.67	5.7	71.24	3.6	74.50	5.0	72.61	4.9
Reading Score	20.04	5.4	17.25	4.1	27.40	5.6	29.67	3.8	28.40	4.0
Writing Score	3.05	1.1	6.00	1.1	5.81	1.2	5.11	1.9	6.11	1.3
Math Score	20.04	7.0	21.30	4.0	28.86	13.7	33.46	6.4	24.29	8.7

TABLE III

COMPARISON OF THE ACADEMIC PERFORMANCE OF
COORDINATED STUDENTS, NONCOORDINATED STUDENTS
AND NON-SEEK STUDENTS OVER A PERIOD OF FOUR YEARS[1]

Measure of Academic Performance (Means)	Group		
	Coordinated	Noncoordinated	Non-SEEK
After One Year	(N=192)	(N=68)	(N=50)
% Credit Hours Passed	60.69	58.69	69.67
College Credits Earned	10.05	10.25	14.64
GPA	1.92	1.75	1.92
After Two Years	(N=138)	(N=48)	(N=40)
% Credit Hours Passed	66.68	66.00	72.93
Credits Earned	26.20	26.52	32.70
Credits Earned in College-Level Courses Only	16.35	16.42	26.80
Overall GPA	1.93	1.96	1.94
GPA in College-Level Courses Only	1.70	1.84	1.90
After Four Years (6/84)	(N=109)	(N=39)	(N=29)
Total Credits Earned	49.23	47.64	66.83
GPA	1.88	1.86	2.10

[1]Values presented after one year are based on all students in the study, even those who withdrew in the first semester. Values for 2nd year are based on only those students who attended all or part of academic year 1981-82. Values for 4th year include only students who attended all or part of 1982-83 and 1983-84.

Table IV (p. 17) presents similar information for the sub-groups of Coordinated SEEK students. During the first year, the students in MAPES and SNAP do best generally. They pass more courses, earn more credits and have higher GPAs. Students in the other high-level remedial group (Level II-Regular) do least well, passing fewer courses and having lower GPAs then the Level I or Mixed group. In the second year, MAPES and SNAP students continue to do best. Regulars have improved and are passing courses and earning credits at a rate comparable to that of the MAPES and SNAP students and at a higher rate than that of the Level I and Mixed level students. The Regulars however, have low GPAs like the Level I and Mixed students. By the fourth year, Level I students have earned the fewest credits; Mixed level, MAPES and Regular the SNAP students are most advanced. The SNAP students also have the highest mean GPA, while none of the other groups differ on this variable.

The significance and meaning of these findings are presented in Table V, (p. 18) which gives the results of the analyses of covariance for each of the academic performance measures and shows to what extent the differences on these measures might be attributable to high school average, scores on skills tests upon entry into college, the combined effect of these precollege academic characteristics (covariates), and, lastly, the experimental group in which the students participated.

All the measures of academic functioning are significantly related to high school average and to the combined effect of the covariates. Reading scores are significantly related to the percentage of courses passed and the earning of credits in the first two years only. And writing scores are significantly related to the earning of college credits during these two years. Mathematics scores, on the other hand, affect only the credits earned in the first year.

In thinking about these findings regarding test scores and credits earned, one should keep in mind that they are a logical outcome of the fact that the test scores determine remedial course placement, with lower scores requiring longer periods of remediation, and that remedial courses carry fewer credits than regular courses or no credits at all.

When we eliminate the effects of high school performance and test scores, experimental group membership (Coordinated, Noncoordinated, Non-SEEK) contributes very little to student performance. It is significantly related only to (1) credits earned in the first year, and (2) credits earned for college level courses only, through the second year. Looking back at Table III we see that the difference seems to be not to be between Coordinated and Noncoordinated students but between SEEK and Non-SEEK students.

A second set of analyses of covariance was performed eliminating the Non-SEEK students and thereby comparing only the Coordinated and Noncoordinated SEEK students. There are similarities, but also some noteworthy differences. These results are presented in Table VI (p. 19).

High school average is related to the passing of courses and to the GPAs in the first two years, but is no longer highly related to how many credits have been earned. Reading score is of greater significance than before, being related to almost all measures in the first two years (except first year GPA). Writing score is still related to the earning of credits, although to a somewhat lesser degree. Mathematics score and experimental condition are not related to any of the college performance measures.

TABLE IV

COMPARISON OF THE ACADEMIC PERFORMANCES OF THE VARIOUS SUBGROUPS WITHIN THE COORDINATED SEEK PROGRAM[1]

Measure of Academic Performance (Means)	Group				
	Level I	Mixed	Level II MAPES	Level II SNAP	Level II-Regular
After One Year	(N=85)	(N=28)	(N=27)	(N=39)	(N=31)
% Credit Hours Passed	53.34	59.55	72.93	75.13	49.67
College Credits Earned	7.25	11.30	12.41	13.71	10.52
GPA	1.75	2.10	2.20	2.27	1.44
After Two Years	(N=53)	(N=16)	(N=24)	(N=34)	(N=11)
% Credit Hours Passed	60.59	64.88	68.75	74.32	70.55
Credits Earned	20.72	27.13	28.29	31.15	31.46
Credits Earned in College-Level Courses Only	10.28	17.56	18.58	22.09	21.18
Overall GPA	1.85	1.82	2.03	2.07	1.80
GPA in College-Level Courses Only	1.59	1.59	1.84	1.85	1.50
After Four Years (6/84)	(N=37)	(N=13)	(N=21)	(N=31)	(N=7)
Total Credits Earned	39.81	51.08	48.86	60.65	51.08
GPA	1.82	1.85	1.87	2.01	1.85

[1]Values presented after one year are based on all students in the study, even those who withdrew in the first semester. Values for 2nd year are based on only those students who attended all or part of academic year 1981-82. Values for 4th year include only students who attended all or part of 1982-83 and 1983-84.

TABLE V

THE EFFECTS OF THE EXPERIMENTAL CONDITIONS(1) AND OF ENTRY LEVEL SKILLS ON THE ACADEMIC PERFORMANCE OF STUDENTS

Measure of Academic Performance	Sources of Variation											
	Covariates(2)		H.S. Average		Reading		Writing		Mathematics		Experimental Condition	
	F	p	F	p	F	p	F	p	F	p	F	p
After One Year (N=310)												
% Credit Hours Passed	9.43	.001***	11.33	.001***	6.72	.01**	1.95	.16	0.39	.53	0.34	.71
College Credit Earned	19.63	.001***	13.44	.001***	4.96	.03*	15.01	.001***	6.36	.02*	5.48	.01**
GPA	5.39	.001***	12.10	.001***	0.69	.41	3.00	.09	0.05	.83	0.32	.73
After Two Years (N=226)												
% Credit Hours Passed	10.59	.001***	10.66	.001***	10.52	.001***	1.39	.24	0.56	.46	0.58	.56
Credits Earned	15.49	.001***	14.34	.001***	5.85	.02*	7.31	.01**	3.85	.05	1.85	.16
Credits Earned in College-Level Courses	20.39	.001***	15.89	.001***	8.14	.01**	14.65	.001***	3.78	.05	8.59	.001***
Overall GPA	5.73	.001***	13.06	.001***	3.67	.06	0.00	.97	0.06	.81	0.85	.43
GPA in College-Level Courses Only	4.59	.001***	11.49	.001***	3.51	.06	0.07	.80	0.51	.48	0.31	.73
After Four Years (N=177)												
Total Credits Earned	6.77	.001***	9.33	.01**	1.20	.27	3.87	.05	0.90	.35	2.63	.08
GPA	3.00	.02*	8.23	.01**	0.73	.40	0.05	.82	0.01	.93	0.95	.39

(1) Coordinated SEEK, Noncoordinated SEEK and Non-SEEK

(2) The combined effect of High School Average, and Reading, Writing and Math Scores

*p ≤ .05

**p ≤ .01

***p ≤ .001

TABLE IV

COMPARISON OF THE ACADEMIC PERFORMANCES OF THE VARIOUS SUBGROUPS WITHIN THE COORDINATED SEEK PROGRAM[1]

Measure of Academic Performance (Means)	Group				
	Level I	Mixed	Level II MAPES	Level II SNAP	Level II-Regular
After One Year	(N=85)	(N=28)	(N=27)	(N=39)	(N=31)
% Credit Hours Passed	53.34	59.55	72.93	75.13	49.67
College Credits Earned	7.25	11.30	12.41	13.71	10.52
GPA	1.75	2.10	2.20	2.27	1.44
After Two Years	(N=53)	(N=16)	(N=24)	(N=34)	(N=11)
% Credit Hours Passed	60.59	64.88	68.75	74.32	70.55
Credits Earned	20.72	27.13	28.29	31.15	31.46
Credits Earned in College-Level Courses Only	10.28	17.56	18.58	22.09	21.18
Overall GPA	1.85	1.82	2.03	2.07	1.80
GPA in College-Level Courses Only	1.59	1.59	1.84	1.85	1.50
After Four Years (6/84)	(N=37)	(N=13)	(N=21)	(N=31)	(N=7)
Total Credits Earned	39.81	51.08	48.86	60.65	51.08
GPA	1.82	1.85	1.87	2.01	1.85

[1]Values presented after one year are based on all students in the study, even those who withdrew in the first semester. Values for 2nd year are based on only those students who attended all or part of academic year 1981-82. Values for 4th year include only students who attended all or part of 1982-83 and 1983-84.

TABLE V

THE EFFECTS OF THE EXPERIMENTAL CONDITIONS(1) AND OF ENTRY LEVEL SKILLS
ON THE ACADEMIC PERFORMANCE OF STUDENTS

Measure of Academic Performance	Sources of Variation											
	Covariates(2)		H.S. Average		Reading		Writing		Mathematics		Experimental Condition	
	F	p	F	p	F	p	F	p	F	p	F	p
After One Year (N=310)												
% Credit Hours Passed	9.43	.001***	11.33	.001***	6.72	.01**	1.95	.16	0.39	.53	0.34	.71
College Credit Earned	19.63	.001***	13.44	.001***	4.96	.03*	15.01	.001***	6.36	.02*	5.48	.01**
GPA	5.39	.001***	12.10	.001***	0.69	.41	3.00	.09	0.05	.83	0.32	.73
After Two Years (N=226)												
% Credit Hours Passed	10.59	.001***	10.66	.001***	10.52	.001***	1.39	.24	0.56	.46	0.58	.56
Credits Earned	15.49	.001***	14.34	.001***	5.85	.02*	7.31	.01**	3.85	.05	1.85	.16
Credits Earned in College-Level Courses	20.39	.001***	15.89	.001***	8.14	.01**	14.65	.001***	3.78	.05	8.59	.001***
Overall GPA	5.73	.001***	13.06	.001***	3.67	.06	0.00	.97	0.06	.81	0.85	.43
GPA in College-Level Courses Only	4.59	.001***	11.49	.001***	3.51	.06	0.07	.80	0.51	.48	0.31	.73
After Four Years (N=177)												
Total Credits Earned	6.77	.001***	9.33	.01**	1.20	.27	3.87	.05	0.90	.35	2.63	.08
GPA	3.00	.02*	8.23	.01**	0.73	.40	0.05	.82	0.01	.93	0.95	.39

(1) Coordinated SEEK, Noncoordinated SEEK and Non-SEEK

(2) The combined effect of High School Average, and Reading, Writing and Math Scores

*p ≤ .05

**p ≤ .01

***p ≤ .001

TABLE VI

THE EFFECTS OF THE EXPERIMENTAL CONDITIONS(1) AND OF ENTRY LEVEL SKILLS ON THE ACADEMIC PERFORMANCE OF SEEK STUDENTS

Measure of Academic Performance	Sources of Variation											
	Covariates(2)		H.S. Average		Reading		Writing		Mathematics		Experimental Condition	
	F	p	F	p	F	p	F	p	F	p	F	p
After One Year (N=260)												
% Credit Hours Passed	7.34	.001***	7.01	.01**	8.92	.01**	1.38	.24	0.01	.90	0.43	.51
College Credit Earned	10.84	.001***	3.28	.07	7.82	.01**	12.69	.001***	0.54	.47	0.00	.95
GPA	3.92	.01**	8.24	.01**	1.79	.18	1.32	.25	0.24	.62	0.24	.62
After Two Years (N=186)												
% Credit Hours Passed	7.52	.001***	7.58	.01**	12.56	.001***	0.23	.64	0.07	.79	0.95	.33
Credits Earned	8.16	.001***	6.28	.02*	8.76	.01**	3.74	.06	0.11	.74	0.35	.55
Credits Earned in College-Level Courses	10.34	.001***	3.54	.06	12.73	.001***	9.43	.01**	0.20	.65	0.37	.55
Overall GPA	5.76	.001***	13.55	.001***	5.90	.02*	1.14	.29	1.01	.32	0.10	.76
GPA in College-Level Courses Only	4.20	.01**	8.49	.01**	5.75	.02*	1.47	.23	2.76	.10	0.67	.41
After Four Years (N=148)												
Total Credits Earned	2.20	.07	1.66	.20	2.65	.11	1.61	.21	0.18	.68	1.13	.29
GPA	1.63	.17	2.46	.12	2.11	.15	1.64	.20	1.84	.18	0.84	.35

(1) Coordinated SEEK, Noncoordinated SEEK

(2) The combined effect of High School Average, and Reading, Writing and Math Scores

*p ≤ .05

**p ≤ .01

***p ≤ .001

The most interesting difference is that, whereas high school average and the combined covariates were significantly related to academic functioning through the fourth year when we included Non-SEEK students, this is no longer true when we look at the SEEK students alone. In fact, none of the variables studied seem to be significant determinants of the academic success of the SEEK students beyond the second year.

College Retention

Table VII (p. 21) gives the retention figures for Coordinated SEEK students, Noncoordinated SEEK students and Non-SEEK students. The number of students still in attendance at the end of the first year, the end of the second year, and the spring semester of the fourth year are given for each group. Also presented are the number of "potential graduates," defined as those students still in attendance at the end of the fourth year who have GPAs of 1.90 or better. The Non-SEEK students appear to have a higher retention rate at the end of each period. They also have a higher rate of potential graduates. Comparisons of the retention figures were made for each of the given time periods and for the projected "potential graduates" by means of a Chi-Square, as follows: Coordinated SEEK vs. Noncoordinated SEEK, Coordinated SEEK vs. Non-SEEK, Noncoordinated SEEK vs. Non-SEEK, Coordinated SEEK vs. Total Noncoordinated (Noncoordinated SEEK and Non-SEEK), and SEEK vs. Non-SEEK. None of these comparisons was statistically significant.

Table VIII (p. 22) gives the retention figures for Coordinated SEEK students grouped according to their skills levels (remedial course placements) on entry into college. These groups are: Level I, Mixed Level and Level II. The Level II group combines MAPES, SNAP and Regulars. The following Chi-Square comparisons were made: Level I vs. Mixed; Level I vs. Level II and Mixed vs. Level II. Students starting at Level I have the lowest retention rate at each point of time examined. The Mixed Level students have the highest level of retention for the first and second years. In fact, by the second year, their retention rate is significantly better than that of the Level I students. By the end of the fourth year, there is a more direct relation between retention and entry level academic skills. The stronger a student's skills on entry, the more likely that student is to still be in school at the end of the fourth year, and the more likely he or she is to graduate successfully. However, only the comparisons between Level I and Level II, the highest and lowest points on the continuum, are significant.

Table IX (p. 24) compares the retention rates for different sub-groups of the Level II Coordinated students: Regulars, MAPES and SNAP. Students in both the MAPES and SNAP groups show very high retention rates. At most points they do significantly better than the Regulars. Furthermore, their retention rate is higher at each point than the comparable retention rate for the Non-SEEK students (see Table III), although not significantly so. Some of these SNAP and MAPES students, however, are having academic problems, as reflected in their low GPAs, so that the "potential graduates" in these two groups are just about equal to the Non-SEEK group and are not significantly higher than the Regulars.

Among Coordinated SEEK students, the stronger the student's skills on entry to college, the more likely the student was to be in school at the end of four years and the better the student's chances of graduating successfully. Thus, the students who placed in all Level II remedial courses were more likely to be successful than the students who had Mixed placements, or the students who placed in all Level I courses. The potential graduation rates for these three groups were 31 percent, 25 percent

TABLE VI

THE EFFECTS OF THE EXPERIMENTAL CONDITIONS(1) AND OF ENTRY LEVEL SKILLS ON THE ACADEMIC PERFORMANCE OF SEEK STUDENTS

Measure of Academic Performance	Sources of Variation											
	Covariates(2)		H.S. Average		Reading		Writing		Mathematics		Experimental Condition	
	F	p	F	p	F	p	F	p	F	p	F	p
After One Year (N=260)												
% Credit Hours Passed	7.34	.001***	7.01	.01**	8.92	.01**	1.38	.24	0.01	.90	0.43	.51
College Credit Earned	10.84	.001***	3.28	.07	7.82	.01**	12.69	.001***	0.54	.47	0.00	.95
GPA	3.92	.01**	8.24	.01**	1.79	.18	1.32	.25	0.24	.62	0.24	.62
After Two Years (N=186)												
% Credit Hours Passed	7.52	.001***	7.58	.01**	12.56	.001***	0.23	.64	0.07	.79	0.95	.33
Credits Earned	8.16	.001***	6.28	.02*	8.76	.01**	3.74	.06	0.11	.74	0.35	.55
Credits Earned in College-Level Courses	10.34	.001***	3.54	.06	12.73	.001***	9.43	.01**	0.20	.65	0.37	.55
Overall GPA	5.76	.001***	13.55	.001***	5.90	.02*	1.14	.29	1.01	.32	0.10	.76
GPA in College-Level Courses Only	4.20	.01**	8.49	.01**	5.75	.02*	1.47	.23	2.76	.10	0.67	.41
After Four Years (N=148)												
Total Credits Earned	2.20	.07	1.66	.20	2.65	.11	1.61	.21	0.18	.68	1.13	.29
GPA	1.63	.17	2.46	.12	2.11	.15	1.64	.20	1.84	.18	0.84	.35

(1) Coordinated SEEK, Noncoordinated SEEK

(2) The combined effect of High School Average, and Reading, Writing and Math Scores

*$p \leq .05$

**$p \leq .01$

***$p \leq .001$

The most interesting difference is that, whereas high school average and the combined covariates were significantly related to academic functioning through the fourth year when we included Non-SEEK students, this is no longer true when we look at the SEEK students alone. In fact, none of the variables studied seem to be significant determinants of the academic success of the SEEK students beyond the second year.

College Retention

Table VII (p. 21) gives the retention figures for Coordinated SEEK students, Noncoordinated SEEK students and Non-SEEK students. The number of students still in attendance at the end of the first year, the end of the second year, and the spring semester of the fourth year are given for each group. Also presented are the number of "potential graduates," defined as those students still in attendance at the end of the fourth year who have GPAs of 1.90 or better. The Non-SEEK students appear to have a higher retention rate at the end of each period. They also have a higher rate of potential graduates. Comparisons of the retention figures were made for each of the given time periods and for the projected "potential graduates" by means of a Chi-Square, as follows: Coordinated SEEK vs. Noncoordinated SEEK, Coordinated SEEK vs. Non-SEEK, Noncoordinated SEEK vs. Non-SEEK, Coordinated SEEK vs. Total Noncoordinated (Noncoordinated SEEK and Non-SEEK), and SEEK vs. Non-SEEK. None of these comparisons was statistically significant.

Table VIII (p. 22) gives the retention figures for Coordinated SEEK students grouped according to their skills levels (remedial course placements) on entry into college. These groups are: Level I, Mixed Level and Level II. The Level II group combines MAPES, SNAP and Regulars. The following Chi-Square comparisons were made: Level I vs. Mixed; Level I vs. Level II and Mixed vs. Level II. Students starting at Level I have the lowest retention rate at each point of time examined. The Mixed Level students have the highest level of retention for the first and second years. In fact, by the second year, their retention rate is significantly better than that of the Level I students. By the end of the fourth year, there is a more direct relation between retention and entry level academic skills. The stronger a student's skills on entry, the more likely that student is to still be in school at the end of the fourth year, and the more likely he or she is to graduate successfully. However, only the comparisons between Level I and Level II, the highest and lowest points on the continuum, are significant.

Table IX (p. 24) compares the retention rates for different sub-groups of the Level II Coordinated students: Regulars, MAPES and SNAP. Students in both the MAPES and SNAP groups show very high retention rates. At most points they do significantly better than the Regulars. Furthermore, their retention rate is higher at each point than the comparable retention rate for the Non-SEEK students (see Table III), although not significantly so. Some of these SNAP and MAPES students, however, are having academic problems, as reflected in their low GPAs, so that the "potential graduates" in these two groups are just about equal to the Non-SEEK group and are not significantly higher than the Regulars.

Among Coordinated SEEK students, the stronger the student's skills on entry to college, the more likely the student was to be in school at the end of four years and the better the student's chances of graduating successfully. Thus, the students who placed in all Level II remedial courses were more likely to be successful than the students who had Mixed placements, or the students who placed in all Level I courses. The potential graduation rates for these three groups were 31 percent, 25 percent

TABLE VII

COMPARISON OF RETENTION RATES FOR COORDINATED SEEK, NONCOORDINATED SEEK AND NON-SEEK STUDENTS(1)

Outcome	Group					
	Coordinated SEEK (N=192)		Noncoordinated SEEK (N=68)		Non-SEEK (N=50)	
	#	%	#	%	#	%
Completed 1 Year						
Yes	164	85%	56	85%	47	94%
No	28	15%	12	18%	3	6%
Completed 2 Years						
Yes	113	59%	42	62%	32	64%
No	79	41%	26	38%	18	36%
In School 6/84 (4th Year)						
Yes, GPA above 2	32	17%	14	20%	15	30%
Yes, GPA 1.9-2	12	6%	4	6%	2	4%
Yes, GPA below 1.9	17	9%	2	3%	2	4%
Total	61	32%	20	29%	19	38%
No, GPA above 2	20	10%	9	13%	10	20%
No, GPA above 1.9-2	12	6%	1	1%	0	0%
No, GPA below 1.9	95	50%	38	56%	21	42%
N.A.	4	2%	—	—	—	—
Total	131	68%	48	70%	31	62%
Potential graduates (Still attending, GPA 1.9 or better)	44	23%	18	26%	17	34%

(1)None of the differences are statistically significant.

TABLE VIII

COMPARISON OF RETENTION RATES FOR COORDINATED SEEK GROUPS AT DIFFERENT SKILLS LEVELS ON ENTRY INTO THE COLLEGE(1)

Outcome	Group					
	Level I N=85		Mixed N=20		Level II N=87	
	#	%	#	%	#	%
Completed 1 Year						
Yes	68	80%	19	95%	75	88%
No	17	20%	1	5%	10	12%
Completed 2 Years						
Yes	43	51%	15	75%	55	65%
No	42	49%	5	25%	30	35%
In School 6/84 (4th Year)						
Yes, GPA above 2	9	11%	4	20%	19	22%
Yes, GPA 1.9-2	4	5%	1	5%	7	8%
Yes, GPA below 1.9	6	7%	1	5%	10	12%
Total	19	23%	6	30%	36	42%
No, GPA above 2	14	16%	0	0%	6	7%
No, GPA above 1.9-2	7	8%	2	10%	3	4%
No, GPA below 1.9	43	51%	12	60%	40	47%
N.A.	2	2%	—	—	—	—
Total	66	77%	14	70%	49	58%
Potential Graduates	13	15%	5	25%	26	31%

(1)The following differences are statistically significant

(a) After 2 years - Level I vs. Mixed: $\chi^2 = 3.90$, $p < .05$
(b) After 6/84 - Level I vs. Level II: $\chi^2 = 8.04$, $p < .01$
(c) Potential Graduates - Level I vs. Level II: $\chi^2 = 5.62$, $p < .02$

and 15 percent, respectively. (See Table VIII.) However, within the Level II coordinated groups (where entry skills are similar) the MAPES and SNAP students showed significantly higher retention and potential graduation rates than the regular Level II students.

The persistence of the MAPES and SNAP students is especially noteworthy when compared to similar data for the Non-SEEK students. At the end of four years, 48 percent of MAPES students and 49 percent of SNAP students are still in school (Table IX) compared to only 38 percent of the Non-SEEK students (Table VII). However, more of the MAPES and SNAP students who are still in school are encountering academic problems and therefore have GPAs below 2.0. Thus the expected graduation rates for the MAPES and SNAP students are the same as the rates for the Non-SEEK students, not greater.

Additional information about retention was provided by calculating the average number of semesters completed by the members of each group, as of the end of the four year period of this study. These figure are: Level I - 5.08, Mixed - 5.10, Level II-Regular - 3.23, Level II - SNAP - 5.77, Level II - MAPES - 5.80, Noncoordinated SEEK - 4.57, and Non-SEEK - 4.98. Except for the Level II-Regulars, the students in coordinated programs, especially those in SNAP and MAPES, are somewhat more persistent than the Noncoordinated SEEK students and the Non-SEEK students.

Discussion

According to this study, Coordinated SEEK programs as a group are no more effective than Noncoordinated SEEK programs in improving the academic performance of remedial students as reflected in their grades, rate of passing courses, accumulation of college credits, or retention. There is some indication in the results, however, that specific types of Coordinated programs, i.e. MAPES and SNAP, achieve higher retention and potential graduation rates than other types, i.e. Level II Regular. Finally, it appears that even though academic performance and skills prior to college strongly influence performance in college for all of the students in this study, being in SEEK mitigates these influences in the areas of retention and potential graduation.

Given the finding that differences in the academic performance of Coordinated and Noncoordinated students could not be attributed to program participation, it seems important to reconsider the way in which our coordinated program is structured. The original model for coordinated programming required that instructors and counselors not only plan curricula together and consult about students, but also that they attend each other's classes as a way of enhancing the team teaching, and that they have periodic joint conferences with students to assess the latter's needs, strengths and progress and provide useful feedback and advice to the students. In practice, some of these strategies have not been followed, because, among other reasons, the time commitments have been impractical. But maybe in making this choice, we have sacrificed some of the most critical elements of an effective program. In addition, one might look at the fact that, as now practiced, the coordinated programming is followed for only the first semester of a student's college attendance. Perhaps this is simply not enough time for the benefits of such programming to be effective. What would happen if coordinated programming, especially in remedial courses, would be extended to a full year? The present study does not address these alternatives. Maybe they would alter our findings and make us more effective, but maybe not.

TABLE IX

COMPARISON OF RETENTION RATES FOR THE SUBGROUPS OF LEVEL II COORDINATED STUDENTS(1)

Outcome	Group					
	Level II Regular (N=21)		Level II MAPES (N=27)		Level II SNAP (N=39)	
	#	%	#	%	#	%
Completed 1 Year						
Yes	16	76%	26	96%	35	90%
No	5	24%	1	4%	4	10%
Completed 2 Years						
Yes	7	33%	18	67%	30	77%
No	14	67%	9	33%	9	23%
In School 6/84 (4th Year)						
Yes, GPA above 2	3	14%	4	15%	12	31%
Yes, GPA 1.9-2	0	0%	6	22%	1	3%
Yes, GPA below 1.9	1	5%	3	11%	6	15%
Total	4	19%	13	48%	19	49%
No, GPA above 2	1	5%	1	4%	4	10%
No, GPA above 1.9-2	0	0%	1	4%	2	5%
No, GPA below 1.9	14	67%	12	44%	14	36%
N.A.	2	10%	—	—	—	—
Total	17	82%	14	52%	20	51%
Potential Graduates	3	14%	10	37%	13	34%

(1)The following differences are statistically significant

(a) After 1 year - Regular II vs. MAPES: $\chi^2 = 4.37$, $p < .05$
(b) After 2 years - Regular II vs. MAPES: $\chi^2 = 5.26$, $p < .03$
Regular II vs. SNAP: $\chi^2 = 10.97$, $p < .001$
Regular II vs. MAPES & SNAP: $\chi^2 = 10.63$, $p < .01$
(c) After 6/84 - Regular II vs. SNAP: $\chi^2 = 4.09$, $p < .05$
Regular II vs. MAPES & SNAP: $\chi^2 = 4.55$, $p < .05$

In the context of these questions about the structure of the Coordinated Skills programs, it seems relevant to consider the reasons why the MAPES and SNAP programs appear to work better than the other coordinated programs including the Regular Level II program. MAPES and SNAP were similar to each other, but different from the other groups in one very important way: skills instruction was accomplished using materials related to the students' career goals, nursing for SNAP students, and science and technology for the MAPES students. The use of this common content might have meant that these groups were somewhat more coordinated since the content selection made joint curriculum planning essential. Furthermore, the use of this common material meant that certain ideas or concepts were repeated in different contexts and thereby reinforced and strengthened. Possibly too, the fact that the material was related to their stated career goals may have helped the students to understand more clearly what those goals were about, and may have also conveyed to them that those goals were being considered very seriously, as genuine possibilities to be pursued. One might expect such a message to have enhanced and strengthened their motivation. But, although we can speculate about alternative structures for our coordinated programming which might improve students' academic performance, the present study does not address these alternatives. Maybe they would make us more effective, but maybe not. We need to keep in mind the possibilities that the beneficial value of coordinated programming may be more limited than we had expected and that we need to look elsewhere for additional solutions to the problem of how best to help our student. Furthermore, with the example of the SNAP and MAPES programs discussed above, we must also keep in mind that these students entered college with stronger skills than the other SEEK students, even the Level II Regular students (Table II).

In the present sample, success in college is on the whole related to prior academic performance in High School and to the level of one's basic skills in reading and writing at the time of admission to college. This finding is reinforced by the related finding that retention and potential graduation among Coordinated SEEK students improves as entry level test scores increase. The connection between the skills a student brings with him to college and his eventual chances of success would lead us to expect greater retention and potential graduation rates for the Non-SEEK students than for the SEEK students. However, although Non-SEEK students begin college with academic and skills advantages and fare better academically while in college, they are not necessarily any more likely to remain in school or to complete their studies to graduation than SEEK students. Apparently SEEK has been able to improve the chances for success of the initially weaker students whom it admits. And, since all the subjects in this study (SEEK and Non-SEEK) had the benefit of academic remediation, this finding of the improved position of the SEEK students confirms the importance of the total package of support services available through SEEK, notably the availability of counseling and tutoring.

In fact, some of the evidence presented suggested that the Non-SEEK students drop out of school more readily than the SEEK students. They spend slightly fewer semesters at school even though they are only slightly more likely to leave in good standing. Apparently SEEK students, especially the stronger ones (i.e., MAPES and SNAP), appear to persist longer even when they are encountering difficulty. In view of an earlier study which found that MAPES students had an increased chance of graduating successfully, although not necessarily as Science or Engineering majors, the present study might be interpreted to mean that, along with the encouragement to persevere, the SEEK students are helped by the encouragement to be flexible about the goals they are pursuing, when necessary, and by career counseling with information about alternative goals. A more extensive study relating persistence to goal flexibility might be of value in illuminating the conditions under which these students drop out.

One additional finding serves as a further indicator that the SEEK program as a whole modifies the influence of prior performance and skills. Although prior skills contributed significantly to college academic performance through the fourth year when Non-SEEK students were included in the

analysis, those skills measures are no longer significant determinants of success when only SEEK students are included. In part, this may be because the strongest SEEK students (MAPES and SNAP) are majoring in scientific fields and are therefore taking the most difficult courses and encountering academic problems. But, other variables such as personal, social, and environmental factors may also be exerting an influence.

Some of the questions raised by this study could be answered by an additional analysis of the present data and others will require further data collection. The present analyses indicate that coordinated programs as a group are no more effective than noncoordinated programs, but they do not compare any individual coordinated program to the noncoordinated program. Since there is some evidence that MAPES and SNAP are more effective than other coordinated programs serving students of similar skill levels, it is possible that some individual coordinated programs have a greater impact than noncoordinated programs. Additional statistical analyses of the present data could answer that question. It would also be useful to gather data on other issues such as economic and social factors which might influence student performance. These two sets of additional information could suggest new types of support programs to improve the retention and performance of SEEK students.

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EFFECTIVENESS OF PEER TUTOR/MENTORS FOR DISADVANTAGED STUDENTS AT BROOKLYN COLLEGE: PRELIMINARY ANALYSES

MARY OESTEREICHER[1]

BACKGROUND

National studies of attrition among the general population of college students are very firm in their conclusions about the heavy contribution of weak academic performance to college withdrawal (e.g., Beal and Noel, 1980; Ramist, 1981). Indeed according to a recent survey, almost half of college freshmen "decided to attend college largely to improve their reading ability" (N.Y. Times, 10/31/86). Such findings are extremely suggestive of the dimensions of the academic problems of the underprepared student. In fact, data gathered on Search for Education, Elevation, and Knowledge (SEEK) students who enter Brooklyn College as freshmen show that the majority generally do not persist long and leave with a grade point average of less than 2.00.

Surprisingly, although college attrition as a function of poor fit between institution and students in general has been quite extensively investigated, attrition among disadvantaged students, in particular, has received inadequate formal study (Tinto, 1982). The work of Fox, who applied Tinto's model of college withdrawal to SEEK students at a senior branch of CUNY (Fox, 1985), is a notable exception. He found that "academic integration was the most salient aspect of development for this group of students." (p.2) Further, just one of his diverse measures of "social integration" was found to bear a significant correlation with persistence: the extent and quality of peer relationships (as defined by Pascarella and Terenzini, 1980).

The question arises: can a formal program using such peer relationships be designed to improve academic performance and stem attrition among disadvantaged students? Considerable research has been done on the most effective ways to initiate new members into non-academic settings, particularly in business. One widely accepted policy is to assign to each new member a mentor who has proven ability in the specific job and who has good interpersonal skills; if this is not done new members may choose their own unofficial mentors who are less than acceptable role models. The mentor's role is to introduce the novice to the surroundings, guide his or her work, and generally serve as an adviser and intermediary between the organization and the new member. Making the human process a learning one makes the learning process a human one. Peer tutoring/mentoring unites the two important factors of academic integration and social integration with peers. Not only does it directly support student progress in coursework; it also offers an exceptionally supportive kind of social integration by developing relationships between mentor and student and among the students themselves under the guidance of the mentor. In addition, the mentor often serves as an agent, introducing the students to other people and other resources at the College.

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Many studies, of course, report improving academic performance through tutoring (see especially Hedin, 1986). Abrams and Jernigan (1984), to cite one good example, have recently demonstrated the effectiveness of support services for high risk college students with respect to time spent using such services and frequency of contracts with tutors. The extra component of mentoring that makes it a more personal process than tutoring can reasonably be expected to strengthen such findings. The research literature on peer tutors shows that tutors effect study skills change in freshmen as well as professional teachers do (Fremouw and Feindler, 1978). It is worth noting that according to the critical review of the literature on mentoring carried out by Merriam (1983), there have been no adequate data-based studies on the effectiveness of mentoring in educational settings.

GOALS OF THE PROJECT

Taking note of the promising signposts in the literature, it was determined that a peer tutoring/mentoring project would be implemented with a view to improving student performance among the SEEK population at Brooklyn College and that the project would be evaluated in terms of change in both the attitude and the actual performance of students.

FURTHER DEFINING THE TUTOR/MENTOR

What is a peer tutor/mentor? This question can best be answered through considering both what a peer tutor/mentor is and is not. The mentor is not a co-instructor and has no role in determining the syllabus or providing regular instructions. Nor is the peer tutor/mentor an isolated tutor, i.e., a person who provides supplementary instruction separate in input and feedback from instructor and classwork. The peer tutor/mentor plays a special role defined by background, attitude, and function. Background: The peer tutor/mentor has successfully completed the specific course to which he/she is assigned and possesses both familiarity with the course material and the requisite practical skills, including the ability to explain concepts and present a viewpoint in both speech and writing. The peer tutor/mentor also has fresh memories of the student view of assignments and other experiences. Attitude: The peer tutor/mentor is student-oriented, i.e., concerned with and eager for the success of all students. The peer tutor/mentor must also share the instructor's concern with professionalism and must be committed to rigorous student work under the instructor's direction. Function: The peer tutor/mentor plays roles both in class and out. The peer tutor/mentor is regularly present in class for continuous familiarity with class lectures, discussions, and assignments, observation of student performance, opportunities for specific instructions for tutorial sessions, and impression on the students of a close association and mutual respect between instructor and mentor. Outside the classroom, the peer tutor/mentor's role includes the traditional aspects of tutoring but is enriched by the close connection to coursework and instructor. The instructor can easily consult with the peer tutor/mentor and indicate specific students or groups of students in need of supplementary work, and can rely on the mentor to assign and check such work. Thus, with no major increase in the instructor's responsibilities, supervised student "time on task" can be substantially increased.

In addition, the peer tutor/mentor's affective impact both in and out of class is, of course, often great. It draws on the students' natural respect for one who has already done well in a course they are taking, a constant reminder that their own goals are attainable. The peer tutor/mentor is a model of seriousness of purpose and proficiency in study skills and communications skills. He or she is also a model for open communication with the instructor and yet retains the ability to "speak the same language" as the students, who may be frustrated, demotivated, or beset by personal problems. Rather than merely being an intermediary between student and instructor, the peer tutor/mentor is a mediator

between student and the goal of success in the course. Further, the mentor can help the student to see the instructor as having a similar role.

DESIGN

The major hypothesis was that peer tutor/mentoring would have a positive effect on the college careers of the experimental SEEK students by comparison with those of the control SEEK students as reflected in the following:

1) mentored-course grade;

2) subsequent academic performance in college;

3) study habits and attitudes as indicated by the Brown/Holtzman Survey of Study Habits and Attitudes (Brown and Holtzman, 1968).

Twelve classes enrolling substantial numbers of SEEK students in the Spring 1985 semester were identified: 6 classes in Core Studies 1, Classical Origins of Western Culture; 2 classes in Core Studies 4, the Shaping of the Modern World; 4 classes in Developmental Writing. The total number of SEEK students was 114. A random assignment of half the classes to experimental status and half to control status was then made for each of the three courses. A peer tutor/mentor was provided for the SEEK students in each of the experimental classes and none was provided for the control classes. The peer tutor/mentors were all congenial, articulate SEEK and/or minority students who had recently completed the course in question with a grade of A. All of the six selected were black females. They were to encourage the participation of their potential mentees and to be available as role models and homework helpers for five hours per week. They were required to attend class with the students at least once a week. They participated in brief training sessions and kept logs of their work. The number of SEEK students in the classes with the peer tutor/mentors (experimental) was 66 (30 Core, 36 Writing). The number of SEEK students in the classes with no peer tutor/mentor (control) was 48 (22 Core, 26 Writing).

It should be noted that despite attempts to make experimental and control groups comparable, there are some differences in the two groups that need to be considered in thinking about the results. First, the entire group of controls appears to have begun with an academic advantage since they had spent 13% more time in school and had earned 19% more credits. This may indicate that they have already shown themselves to be more academically successful than the experimental group. Second, in the case of the writing students, the experimental group started out with an academic advantage; among those who had previously taken courses the experimental group had a higher grade point average (1.87) than the controls (.88). Apparently the writing students had been unofficially grouped according to ability.

RESULTS

Course Grades During the Semester of Mentoring. The basic comparison to make between the two groups is in terms of grades in the mentored courses (for the Spring 1985 semester). Although the differences are not startling, all of the mentored classes did better than the controls. In mentored Core Studies 1 the average grade was 1.44, control was 1.27; in Core Studies 4 the mentored group received 1.75, the unmentored 1.50; the mentored writing classes averaged 2.21, the unmentored 2.00.

Thus, the mentored students in all three courses fared better than the unmentored students. However, in the case of the writing course it may simply be the unofficial ability grouping rather than the mentoring that is creating the difference in grades.

Grade Point Average For Semester After Program. Most interesting is a direct comparison of the Core Studies experimental and control students' grade point averages for the semester after the mentoring project, Fall 1985. (Here Core Studies 1 and 4 are combined.) Twenty-three mentored students and eighteen control students completed the Fall, 1985 semester. The two sets of students had identical indices of 1.90 when they entered the experimental project after the Fall, 1984 semester. Their averages for the Fall, 1985 semester are 1.71 for students formerly in mentored Core classes, and 1.54 for controls. This suggests that mentoring may not only have improved the students' grades in the course, but may also have impacted the students' basic approach to school work enough to help them maintain their advantage in the following semester.

Because of the unofficial ability grouping among the writing students discussed earlier, it is difficult to draw conclusions about their performance in the semester after the peer tutoring took place. Nevertheless, the data for that semester are as follows: Among students who had previously had some college work, the Fall 1985 average of the mentored group was 1.35 while the non-mentored group averaged .88. In the case of the two writing classes who had not had college work prior to the project semester, the 12 experimental students averaged 1.58 and the 11 controls achieved a 2.10 average in the Fall of 1985. Again, this information is of limited use since the groups apparently were not comparable at the outset.

Re-enrollment at Brooklyn College. When re-enrollment is considered, no substantial difference appears. Fifty-four percent of the controls were still attending Brooklyn College in the Spring of 1986, while 51% of the mentored (not including 1 who graduated) were in attendance. However, re-enrollment at Brooklyn College is not a particularly meaningful statistic, since both transfers (and it is known that some mentored students were counseled to transfer to community colleges) and school-leavers are combined together in calculating college attrition statistics. Unfortunately, we were not able to break this category down.

Pretest/Posttest Results on Brown/Holtzman Survey of Study Habits and Attitudes. The Brown/Holtzman Survey of Study Habits and Attitudes (normed on college freshmen) is a 100 item questionnaire yielding four component subscores: Delay Avoidance - "promptness in completing academic assignments, lack of procrastination, and freedom from wasteful delay and distraction"; Work Methods - "use of effective study procedures, efficiency in doing academic assignments, and how-to-study skills"; Teacher Approval - "opinions of teachers and their classroom behavior and methods"; Education Acceptance - "approval of educational objectives, practices, and requirements." The Brown/Holtzman survey also yields a single composite overall score, titled "Student Orientation".

Examination of the means of the overall scores of the SSHA, Student Orientation, reveal considerable differences in the reactions of control and experimental students to college work. Attitudes of both groups became more negative. However, the attitudes of the mentored group because less negative than those of the control group. They moved from the 40th to the 35th percentile while the controls fell from the 60th to the 35th percentile. In fact, when the Core students are separated from the Writing students, a slightly different picture emerges. The mentored Core classes actually show a slight positive change from the 35th to the 40th percentile contrasting with a slight drop on the part of the controls from the 65th to the 60th percentile.

In both control and experimental groups the primary positive change among individuals in the Core classes who were tested both pre and post program was in the teacher approval subtest, which is

designed to "measure opinions of teachers and their classroom behavior and methods." The 13 mentored students moved from the 45th to the 50th percentile, the 7 controls from the 40th to the 45th. Both groups improved, a gentle compliment to the faculty.

However, in all other subtests the Core controls showed far superior attitudes to school work both before and after the program. For example, though Core controls dropped from the 80th percentile to the 65th on Delay Avoidance; the experimentals, despite a small rise from the 40th toward the 45th percentile, were still far behind. In the Work Methods subtest the controls moved from the 70th to the 60th percentile, while the experimentals dropped from the 30th to the 25th. In Education Acceptance the controls remained at the 60th percentile, while the experimentals remained at the 35th.

The fact that the Core experimentals achieved better grades both in the course and in their averages for the Fall '85 semester, despite being far behind the Core controls in the habits and attitudes thought requisite for academic success, suggests that the peer tutor/mentoring may have had a considerable impact.

Although the mentored and the non-mentored writing students both showed more negative study habits and attitudes after their experience of being mentored, the mentored group dropped only from the 35th to the 30th percentile while the non-mentored students dropped from the 50th to the 20th percentile. However, as described above, the two sets of writing students are not comparable, making interpretations of this finding difficult.

Program Questionnaire Results. An end-of-program questionnaire distributed to all participants was answered by 52% (34) of the experimental group and 42% (20) of the controls. To the question: "How much did you need help with this course?" 41% of the mentored and 30% of the controls indicated "some need," and 18% of the mentored and 9% of the controls stated "little need." Assigning a value of one to three to these categories and equating one with "great need" results in an average of 1.76 for the experimentals and 1.85 for the controls. The mentored admitted to a slightly greater need for help. More interesting, perhaps, is the relative polarization of the experimentals' response. That is, exposure to the program seems to have resulted in more students admitting they were in great need of help and more denying it.

A second question, "How much help did you get with this course?" was answered by the same percentages of the two groups as was the question above. 65% of the mentored and 55% of the controls said they had received "great help," 29% of the mentored and 30% of the controls said "some help," while 6% of the mentored and 9% of the controls said "little help." Thus, the mentored consistently responded more positively to this question.

Satisfaction of Students in Mentored Classes. A further series of questions was asked only of the students in the mentored classes. A smaller number, 21-23 (32% - 35%) responded. "Did you see an improvement in your course work from mentoring?" 41% said they saw a "great improvement," 50% saw "some improvement," and 9% saw "little improvement." That 41% of the respondents see "great improvement" in their work resulting directly from mentoring is high praise indeed. Two other questions, "Did the mentor seem to be a person whose experience you could learn from?" and "Did the mentor have any impact on the way you see yourself and/or your college work and/or this course?" were answered quite similarly, 67% saying "yes" and 33% saying "no" to the first question; while 65% said "yes" to the second and 35% said "no." These responses are quite favorable indicating a high personal regard for the mentors and their effectiveness. More important, however, is the final question: "Would you recommend mentoring to other students?" Ninety-six percent of the respondents said "yes."

CONCLUSION

Despite such problems in the study as non-comparable writing classes and low return rates among some groups on some program measures, the results of the project all seem to point in the same direction: Peer tutoring has a positive impact on the academic integration of disadvantaged students. Mentored students got better grades in the course, had better grade averages in the semester following the project, and had less deterioration in attitudes shown to be indicators of academic success. Further, the students themselves found the program useful, and an overwhelming majority were willing to recommend it to others - all of this despite the fact that attitudinal measures showed them to be much less promising candidates for academic success than the control group.

The comparisons of mentored course grades, grade averages in the following semester and changes in study habits and attitudes presented here must be seen as preliminary and exploratory. Further analysis of the data are presently being conducted to determine whether the grade differences between mentored and unmentored students are statistically significant. In addition, the progress of the students over a longer period of time is being followed.

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ACTIVITIES OF THE OFFICE OF SPECIAL PROGRAMS

INTRODUCTION

With this issue of Linkages we are introducing a regular feature entitled "Activities of the Office of Special Programs." The purpose of this section is to give readers a sense of the programs and services offered by the Office of Special Programs (OSP) and to alert them to our efforts to communicate information about the SEEK, College Discovery (CD), and College Discovery and Development (CDDP) Programs.

SEEK/CD TWENTIETH ANNIVERSARY CELEBRATION

A twentieth anniversary celebration of the SEEK and College Discovery Program took place in Fall 1986. It began with an Honors Reception on December 11th, followed by a two-day conference on December 12th and 13th. The ceremonies were held at the City College of the University.

The theme of the celebration was: "SEEK/CD - Celebrating the Past, Defining the Future." The purpose of the reception was to bring together people who had been a part of SEEK and College Discovery over the past twenty years. Founders, legislators, former directors, alumni, faculty and students celebrated the accomplishments of Special Programs and honored those who had helped to achieve the goals of the programs. The SEEK/CD 20th Anniversary Conference -- a year in the making -- provided a forum for sharing the success story of The City University of New York's Special Programs, pioneers in developmental education programs in higher education.

A University-Wide Conference Planning Committee, co-chaired by two Special Programs directors, Norma Brady and Roberta Vogel, and consisting of more than thirty Special Programs campus faculty and staff, ensured the successful implementation of thirty-two workshops and research presentations. Over 300 persons, including students, alumni, teaching, counseling and administrative staff, participated in activities that focused on instructional and counseling trends, innovations, and related retention issues in developmental education.

A special feature of the Conference was a workshop conducted by SEEK and CD alumni. The panel discussed their college and professional experiences and the need to establish a network to support and promote educational and career mobility for Special Programs students and alumni. It was at this workshop that a Special Programs Alumni Association was initiated. (Its members have held a number of meetings since then, bringing together students and alumni from across the nation to address the Association's purpose and activities.)

At the two-day conference, the following served as keynote speakers: Dr. Albert H. Bowker, former Chancellor of The City University; Dr. Samuel D. Proctor, Pastor of the Abyssinian Baptist Church; and Dr. Barbara Sizemore, Associate Professor of Black Community, Education and Research and Development at the University of Pittsburgh. Luncheon guest speakers were Dr. Maria Josefa Canino, member of the University's Board of Trustees and Dr. T. Edward Hollander, Chancellor of Higher Education in the State of New Jersey. Other speakers included Manhattan Borough President David Dinkins who, as a State Assemblyman twenty years ago, played a key role in

framing the SEEK legislation; former Deputy Mayor Basil Paterson; Assemblyman Roger Green, chair of the Black and Puerto Rican Caucus; James P. Murphy, Chairman of the City University Board of Trustees; University Chancellor Joseph S. Murphy; and Bernard Harleston, President of The City College of New York.

Serving as Honorary chairman of the 20th Anniversary Committee was Dr. Albert A. Bowker. Honorary vice chairpersons were Dr. Kenneth B. Clark, a former member of the New York Board of Regents and Dr. Luis Quiero Chiesa, a former member of the City University Board of Trustees.

As a tribute to the achievement of the two programs the Congress approved and President Regan signed a resolution designating December 11th as "National SEEK and College Discovery Day." Congressmen Charles Rangel and Robert Garcia, who, with Senator Patrick Moynihan authored the resolution, were among the speakers at the commemorative ceremonies.

In addition to recognizing the accomplishments of the Programs, the University honored the achievements of SEEK and College Discovery graduates, students presently enrolled in Special Programs, and its faculty and staff. The Chancellor's Alumni Achievement Awards were presented to six alumni at the Honor Reception. Thirty-one alumni received the Chancellor's Award for Outstanding Alumni and the Founder's Award for Achievement Under Adversity. These former students exemplified the enormous personal and career strides made by vast numbers of the 13,800 graduates of the two Programs. In addition, fifteen currently enrolled students were presented with the Chancellor;s Award for Outstanding Student and four Special Programs faculty received awards for Dedicated Years of Service.

CDDP HONORS CONVOCATION

Nearly 150 CDDP high school students, teachers, parents, and CUNY representatives gathered at York College on February 24th, 1987, to honor the achievements of CDDP students city-wide. In one category, two CDDP graduates now in CUNY and the five current CDDP students with the highest cumulative CPAs were honored as Urban Scholars. Almost 60 seniors with high school averages above 80 received certificates in recognition of their academic achievement. New York State Regent Adelaide Sanford in a provocative address congratulated the students and urged them and their peers in the audience to claim their rightful place among the nation's best and brightest by taking advantage of the many educational opportunities open to them. Three former CDDP students now in CUNY talked about their college experiences and career aspirations.

A second purpose of the convocation was to inform current CDDP students about the ten-week Precollege Institutes held on four CUNY campuses in the spring: College of Staten Island, Borough of Manhattan Community College, Medgar Evers, and Lehman College. Representatives of CUNY faculty and staff who coordinate the Institutes ran mini workshops to talk about the science and math-based Institutes which are one component of the Urban Project conducted by the Board of Education/City University Consortium.

CUNY WELFARE ADVOCATES COUNCIL

An estimated fifteen thousand of CUNY's 183,000 students are receiving public assistance. According to Chancellor Murphy, "Almost half of those pursuing degrees on a full-time basis come

from families with total annual incomes lower than $12,000, barely above the poverty level." Because of Special Program's economic eligibility criteria it is safe to predict that a substantial number of students affected by the current Social Service Law are SEEK and CD students. Program counselors report that more and more students, particularly women, are experiencing difficulty with social service agencies.

Because of this situation Council Member Ruth Messinger initiated discussions of the welfare rights of college students among staff from the City University campuses, the Office of Special Programs, and the Office of the Chancellor. The group, which began meeting early in 1987, now meets on a regular basis and is called the CUNY Welfare Advocates Council. Through various activities it conducts education and advocacy to change current welfare legislation at the City, State, and Federal levels as well as advocating for individual students. The Council has proposed the formation of the CUNY-Wide Student Welfare Rights Advocacy and Information Committee which would be under the University Student Senate and would use CUNY Law School students to provide direct services.

The Council is in full support of the legislative proposal to amend the Social Services Law to eliminate the distinctions made between liberal arts programs and vocational training programs vis-a-vis eligibility for day care assistance.

The Council also shares Councilwoman Messinger's delight in that new policy has been developed whereby students enrolled in college programs are exempted from report-to-work requirements and agrees with her that "additional changes in policy and practice need to be taken to be certain that students on welfare know their rights and have fewer obstacles put in their path..."

Angela Sales, the Coordinator of Counseling Services, represents the Office of Special Programs on the CUNY Welfare Advocates Council where she serves as the chairperson of the sub-committee on seminars and as a member of the sub-committee on legislation. The information gathered at these meetings is shared with the Directors of the Special Programs and with the Special Programs Council of Counseling Coordinators at their monthly meetings.

CONFERENCE PRESENTATIONS

National Conference on the Freshman Year

Several staff members from the Office of Special Programs made presentations at the 1987 National Conference on the Freshman Year. Sponsored by the National Center for the Study of the Freshman Year Experience, the Conference was initiated in 1982 by a group of post-secondary educators interested in programs to promote freshman retention and adjustment. This year the West Coast meeting of the Conference was held at the University of California at Irvine. There Herman Wright of the OSP presented an overview of the Urban Project, part of the College Discovery and Development Program. Specifically, he described the Pre-College Institutes (PCI's) and the Summer Math and Science Institute's (SMSI's) for high school sophomores, juniors, and seniors offered by CUNY. He used the Lehman College SMSI as an example. At the East Coast Conference, Barbara Gombach and Albertine Power from the OSP and William Radovich, the CDDP Project Coordinator from the Board of Education gave a similar overview. Then the principal from Seward Park High School, Dr. Noel Kriftcher, and faculty from the Borough of Manhattan Community College (Drs. Charles Kosky, Chairman of the Science Division and Edward Whitley, Assistant Professor of Chemistry) discussed the collaboration between those two schools aimed at offering a sequence of educational experiences to supplement high school studies from post eighth grade to post twelfth.

According to our staff attending the Conference, the issue of underprepared students that Special Programs and the University have been working on for twenty years is just beginning to be faced by many of the universities represented at the Conferences. Close collaboration between high schools and colleges is one important way to prevent the problems that lead to attrition in the freshman year. In 1988 the Center will sponsor two national and three regional conferences on the freshman year.

CUNY ESL Council Conference and the Conference on Academic Approaches to Educational Opportunities

The Prefreshman Summer Program was the topic of a panel organized and presented by three Office of Special Programs staff members at two conferences during the Winter and Spring of 1987. Frank Kehl led off the presentations with an overview of the program. After giving a brief background on the funding models and a profile of the students, he described the four components of the program model - developmental instruction, counseling, tutoring, and financial aid - and then gave some examples of variations on the model. Next Laraine Bengis presented the Prefreshman Summer Program evaluation model and overall findings since 1980. Each year the Office of Special Programs generates quantitative data on the PFSP students (published in yearly reports from the OSP) while campus evaluators examine issues specific to individual programs. Over the years the PFSP has been shown to improve participants' basic skills and to increase student retention. It has served as a prototype for a similar program emanating from CUNY's Office of Academic Affairs. The final presentation by Lourdes Mangual described the five pilot ESL Prefreshman Summer Programs developed in response to the increasing number of students in SEEK and College Discovery for whom English is a second language. In this program counseling and tutoring were tailored to this specific group. The evaluation of the ESL Prefreshman Summer Program showed success in both the cognitive and affective domains.

This panel was first presented at the February 21st conference of the CUNY ESL Council. There Eleanor Pontes, Dean of the Office of Student Affairs and Special Programs, participated in the keynote panel on ESL programs and student retention. On April 27th, 1987, the panel was again presented at the Special Programs Institute XVIII on Academic and Vocational Approaches to Educational Opportunities sponsored by the SUNY Office of Special Programs.

CUNY Student Personnel Conference

The potential for increasing retention and guiding students toward meaningful careers through high school-college collaboratives was explored in a panel presented by the Office of Special Programs at the May 8 CUNY Student Personnel Conference. The three presenters, Gloria Garcia and Carolyn Koerner from the College of Staten Island, both CDDP consultants, and Olga Vega from LaGuardia, who served as an intern in the Office of Special Programs during 1986, titled their presentation "Collaborative Programs in Secondary and Postsecondary Institutions: A Luxury or a Necessity?"

Hunter College Conference on Counseling Special Programs Students

Two staff members gave presentations at the Fourth Annual Conference on Counseling Special Programs students sponsored by Hunter College in April. A workshop on "Sexual Harassment: Intervention and Referral" was presented by Peggy Crull. Dean Eleanor Pontes spoke on the academic progress, retention, and graduation rates of Special Programs students.

PUBLICATIONS

Practical Research

In the Spring of 1987 the Office of Special Programs published Practical Research, a collection of articles based on release-time research done under the aegis of the SEEK-Funded Retention Research Grant Program. The three articles in this volume, which was edited by Frank Kehl, look at a variety of phenomena to explain attrition/retention. In keeping with the purpose of the research grants, the authors suggest solutions to the problems they uncover.

The first article examines how 7 SEEK ESL students approach writing assignments and compares their techniques to those of 7 non-SEEK ESL students. The second follows a group of 435 SEEK students to determine if those who persist have different strategies for handling academic hurdles than those who drop out. An exploratory program to help SEEK students develop career goals is the focus of the final article.

As new retention studies funded through the Office of Special Programs are completed and written up, additional volumes of Practical Research will be published.

New Directions in Counseling

In the Winter of 1988 the Office of Special Programs will publish New Issues in Counseling. This is a compilation of papers selected from the Hunter College SEEK Counselor's Conference for the past three years. It covers such diverse topics as the special needs of single parent students, groups for students on probation, and the problems of the Hispanic counselor. This volume was initiated by the organizers of the conference; the papers were compiled and edited by Justina Gonzalez-Marti and John Green.

Urban Project Student Profile

The results of the most recent follow-up of the Urban Project will soon be released by the Office of Special Programs. The Urban Project, designed to give approximately 100 CDDP students special math and science instruction in a college setting, was funded in 1981 by a grant from the Ford Foundation. There have been several reports out of the Office of Special Programs tracking the progress of these students. The current report, written by Janice Moore, a student at the CUNY Graduate Center, looks at data from 1983 through 1986 and describes student performance in college as well as in high school, comparing the progress of the CDDP students to that of their high school and college classmates.

Special Programs Third Management Conference

The published summary of the Special Programs Third Management Conference which was held in the Spring of 1986 and was entitled "Building Linkages" will be available in the Winter of 1988. It will highlight the information generated at the conference under the headings of: Articulation-policy and practice; Research-based planning as a program management function; Program development and accountability expectations; Faculty development and program development. It also offers suggestions for the Fourth Management Conference scheduled to take place in Spring, 1988.

CONTRIBUTORS

Frances Geteles is an Associate Professor in the SEEK Department at City College where she has worked since 1967. She holds a Ph.D. in Clinical Psychology from Columbia University. In addition to her regular duties as a counselor, she chairs the SEEK Committee on Course and Standing and is the coordinator of services for disabled students at City College. Her research grows out of her interest in combining program development with evaluation.

Mary Oestereicher is Associate Dean of the College of Liberal Arts and Sciences at Brooklyn College and is a member of the Department of Educational Services. She holds advanced degrees both in English Literature from the University of Sussex, England, and in Psychology from Columbia University. She directs the Peer Tutoring Project at Brooklyn College.

David Walters is a Lecturer in the Department of Educational Services/SEEK at Brooklyn College. He received a B.S. in Health, Physical Education, and Recreation from Central State University in Wilberforce, Ohio, an M.S. in Recreation Administration from Indiana University in Bloomington, Indiana, and an M.A. and a Six-Year Professional Certificate in Guidance and Counseling from Brooklyn College. Since 1968 he has worked in the Department of Educational Services at Brooklyn. He has served on several departmental and college-wide committees and has made presentations on the TAN/PEP Project at the American Association for Counseling and Development National Conference and the National Conference on Black Students' Retention in Higher Education.